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and the food-processing industry in
developing countries

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**SUGGESTIONS FOR MEASURES TO STIMULATE CO-OPERATION BETWEEN
THE CO-OPERATIVES OF DEVELOPED AND MORE INDUSTRIALIZED
DEVELOPING COUNTRIES AND THE FOOD-PROCESSING INDUSTRY
IN DEVELOPING COUNTRIES***

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I. INTRODUCTION

1. The Second UNIDO Consultation on the Food-Processing Industry, held at Copenhagen, Denmark, in 1984, concluded "that increased involvement of co-operatives ... in international co-operation for the development of the food-processing industry in developing countries would be highly beneficial to production, processing and marketing operations".^{1/} The Consultation, therefore, recommended that UNIDO, among others, "prepare, based on experience, suggestions for measures, including those for trade promotion, to stimulate co-operation between the co-operatives of developed and the more industrialized developing countries and the food-processing industry in developing countries".^{2/}

2. The present paper is aimed at assessing the role played by food-processing co-operatives in the economies of the developed and developing countries and, more important, in international collaboration. It also attempts to list existing constraints and to suggest measures which may strengthen co-operation in the field of the food-processing industry.

(a) Basic assets of food-processing co-operatives and co-operative food processing

3. In general terms, it should be pointed out that the number and significance of food-processing co-operatives are rather low all over the world. Co-operative statistics, among them the regular statistics of the International Co-operative Alliance, do not specify food-processing co-operatives. There are only a few countries that distinguish co-operatives specialized in food processing.

4. On the other hand, co-operative food processing is very important in both the developed and developing countries. It is much more important than public opinion - including professional public opinion - is aware of. Food processing in many countries is part and parcel of the activities of

^{1/}Report of the Second Consultation on the Food-Processing Industry with Special Emphasis on Vegetable Oils and Fats, Copenhagen, Denmark, 15-19 October 1984, ID/329, page 7.

^{2/}Ibid, p.9.

agricultural co-operatives, consumer co-operatives, fishery co-operatives and multi-purpose co-operatives. Some co-operatives, such as dairy or sugar-producing, include processing by definition.

Market-economy countries

5. In the market-economy countries, food processing is an ever-increasing part of the activities of agricultural/marketing/and multi-purpose co-operatives. According to COGECA^{3/} estimates, "It may be assumed that on average more than half of the purchases and sales in agriculture are controlled by co-operatives, i.e. enterprises which are under the control of farmers. A considerable part of the industrial food-processing sector is also under the control of co-operatives."^{4/} The importance of co-operatives is further stressed by the facts that their number is approximately 40,000 in the countries of the European Community and that almost all farmers are members of one or several co-operatives (the number of co-operative members, including double membership, is over 10 million).

6. In spite of the general validity of the above-mentioned phenomenon, significant differences exist between the various countries. Some examples of this are the following:

In Denmark there are 275 co-operative organizations and companies which process and market farm products. Their membership is more than 160,000 and they employ about 20,000 people. Most of them produce dairy products (butter and cheese), but co-operative bacon factories and poultry processing are also very widespread. These co-operatives and co-operative companies account for 88% of butter production and 80% of cheese production.

In the Federal Republic of Germany the total number of agricultural commodity and processing co-operatives was 5,329 in 1983, of which 2,175 were multipurpose. More detailed data are available for 1980 when the composition of agricultural commodity and processing co-operatives was as follows:

^{3/}COGECA: Comité Général de la Coopération Agricole de la C.E.E.

^{4/}COGECA Report on Activities in 1977-1979, p.6.

	<u>Number of co-operatives</u>
Multipurpose	2,745
Dairy and milk processing of this: processing plants	1,588 461
Cattle processing	255
Other commodity and processing	391
Wine-growers	346

Co-operatives dealing with cattle and other farm animals are increasingly involved in the production of sausages and meats. More than 12% of the fruit- and vegetable-sales co-operatives are processing co-operatives. They produce fruit juices and alcohol. Some of them participate in international trade to a considerable extent and export high-quality products. The co-operative dairies play an essential role in the FRG; they handle some 78% of the milk processed by dairies. They produce all dairy products and cover a very considerable part of the market.

In France 850 co-operatives deal with milk and dairy products and provide 52% of the butter, 33% of the cheese, 50% of the milk powder, and 33% of the yoghurt. Wine co-operatives and co-operative distilleries produce 65% of the wine and distilled grapes. Fruit and vegetable co-operatives provide 20% of processed fruit and 30% of processed vegetable. Food processing shows an increasing trend. In the course of the past 15 years co-operative employment has increased considerably more in the cattle and meat, and the canned food sectors and the dairy industry, than in other sectors. The total number of those employed by agricultural co-operatives comes to about 130 thousand.

In Italy the number of co-operatives involved in food processing in 1978 was as follows:

<u>Sector</u>	<u>Number of co-operatives</u>
Dairies	3,250
Distilleries	13
Oil mills and processing residues	581
Preserved food	23
Mills and rice mills	61
Storage, processing and sales products produced by the recipients of land reform	2,427

In the Netherlands the number and branch composition of food-processing co-operatives in 1979 was as shown below:

<u>Branch of activity</u>	<u>Number of co-operatives</u> ^{5/}	<u>Share of co-operatives in the market in 1978</u>
Milk and dairy products	43	x
Butter production		94
Cheese production		92
Milk powder		86
Pork and beef	2	
Slaughtered pigs		27
Slaughtered cattle		18
Sugar	1	
Sugarbeet deliveries		60
Potatoes	1	
Processed potatoes		100

It should be noted here that the largest exporters of dairy products, starch and potato products are Dutch co-operatives.

A further interesting example is Ireland where co-operatives provide 100% of butter production. In the United Kingdom, however, agricultural co-operatives have not developed activities beyond the stage of cleaning, grading and packing for direct retail sales.

Finally, Sweden is worth mentioning. The ownership structure of the food and processing industry is as follows:

<u>Type of firm</u>	<u>Percent of total food industry's production</u>
Agricultural co-operatives	46
Private companies	25
Consumer co-operatives	12
Foreign-owned companies	12
State-owned companies	5

^{5/}Due to a considerable concentration process the total number of the Dutch agricultural and horticultural co-operatives was some 1,700 in 1979 including approximately 1,000 co-operative banks.

In Canada supply co-operatives, agricultural co-operatives, fisheries co-operatives and dairy co-operatives are involved in food-processing activities. For example, the Coopérative Fédérée de Québec has 135 local and regional member co-operatives with 35,000 individual members. The co-operatives deal with the production, processing and marketing of various products such as milk, pork, beef, lamb, poultry, fruits, vegetables and cigarette tobacco. From among the agricultural co-operatives, the fruit and marketing co-operatives are most engaged in processing. The Scotian Gold Co-operatives is the largest single processor of apples produced in Nova Scotia's Annapolis Valley. The Beemaid Honey Limited which is the marketing agency for two honey producers' co-operatives processes and markets honey in 27 countries. All fisheries co-operatives process fish and seafood. They had 7,705 individual members in 1981 and employed a further 2,641 people. Fisheries co-operatives are grouped in four associations. The number of members of dairy co-operatives is more than 33 thousand and some twelve large dairy co-operatives handle almost half of Canada's processed dairy products.

Centrally-planned economy countries

7. In the European centrally-planned economy countries, food processing and food industry activity appears in the framework of agricultural production co-operatives and consumer co-operatives. In both types food processing represents an important line of activity. In most of the countries in question agricultural production co-operatives are the main institutions of production organization in agriculture. They carry out collective activities first of all in the field of primary agricultural production. However, their pattern of activity includes non-agricultural branches as well, one of the most significant being food processing which increases the value added of their produce and provides them with additional income. The processed produce only partly supplies local markets, the bulk of it being sold to wholesalers and exporting companies.

The consumer co-operatives' main function is to provide the population - in most countries, primarily the rural population - with consumer goods and to purchase the agricultural produce of small-scale producers and some of that of the production co-operatives. In performing their supply function consumer co-operatives become involved in food processing to a considerable extent. The most important objective of this is satisfactorily meeting the demands of the local or regional populations in terms of bread, beverages (primarily soft), meat, meat products, processed fruit and vegetables. A certain part of the food processed by them also contributes to the national stock and/or export market.

8. Co-operative food processing has some similar features in the centrally-planned economy countries, but there are also considerable differences. A brief review of the most important characteristics and role of the phenomenon illustrates this.

Bulgaria: Consumer co-operatives carry out fruit and vegetable processing, operate slaughterhouses and meat-processing plants, produce soft drinks, bread and baker's ware. They contribute 55% of the bread, 36% of baker's ware, nearly all of the soft drinks and mineral water and more than half of confectionery products. Agricultural-production co-operatives participate in the food industry to an ever increasing extent by producing canned foods, sugar, sweets-industry products, beer and soft drinks.

Czechoslovakia: Consumer co-operatives are fully self-sufficient in bread, baker's ware, confectionery, soft drinks and certain canned foods.

German Democratic Republic: The sales of food products produced by the consumer co-operatives increased by 40% between 1971 and 1981. Consumer co-operatives produce 30% of all bread and 25% of the total meat products in the country. In the course of recent years the food-processing plants of consumer co-operatives merged into so-called "branch combines" and have increased their output of bread, baker's ware, puddings, confectionery and meat products.

Hungary:: The agricultural production co-operatives have a great share in food processing industrial output. A considerable part of the farming co-operatives' gross production value is that of food industrial activities. The agricultural production co-operatives/the total number of which is 1,279/run 2,774 food industrial plants. Among them 212 deal with meat processing, 26 with poultry and eggs processing, 57 with milk processing, 117 produce canned foods and there are 54 bakeries, 20 paste plants and 1 sugar refinery. Consumer co-operatives also contribute to the food-processing output to a significant extent.

Poland: The Polish co-operative system is somewhat different from the rest of the European centrally-planned economy countries. The share of agricultural production co-operatives is much lower than in these other countries. In agriculture, private farming prevails promoted by an appropriate co-operative structure. Both the agricultural and the consumer co-operatives carry out food processing. Co-operatives have a 34.6% share in the total output of the socialist food industry in Poland without the private agricultural sector. This is contributed by the "Peasant Self Help", dairy, horticultural, agricultural co-operatives and by the "Spolem" urban consumer co-operatives. In 1983, the co-operative food industry was based on a total of 8,922 plants employing 231.2 thousand people.

Romania: One of the main lines of activity of the so-called commodity-producing, purchasing and marketing co-operatives (consumer co-operatives), is food-processing based on primary agricultural produce purchased from small-scale, including part-time, producers. Similar to other countries' consumer co-operatives, they are involved in bread and baker's ware, canned food, soft drink, confectionery production and meat, fruit and vegetable processing.

Soviet Union: Within the framework of the consumer co-operatives, there are some 7 thousand food-processing industrial plants, producing canned food (1.6 thousand million tins), meat products (230 thousand tons), confectionery (120 thousand tons), soft drinks (1,250 thousand hectolitres). The consumer co-operatives run 12 thousand bakeries and produce more than 12 million tons of bread and baker's ware.

The agricultural production (kolkhoz) co-operatives also have a considerable share in food processing.

Developing countries

9. In general, co-operative food processing in the developing countries is rather limited. It is carried out mainly by marketing co-operatives and agricultural co-operatives, but in a number of countries, primarily in the more industrialized developing countries, food-processing co-operatives do exist. Nevertheless, their share in total food processing remains low. Their contribution to total food processing is difficult to estimate since no reliable statistics are available. In some fields and in some cases, however, food processing co-operatives have made good progress.

India is a good example of what may be termed as partial achievement in this field. In 1980 there were 2,033 co-operative processing units involved in agricultural processing all over the country and 75% of them were concerned directly with food processing. They embrace first the dairy and sugar subsectors but are engaged in oilseed processing and fruit and vegetable processing as well.

The dairy subsector includes more than 10,000 village-level dairy co-operative societies with a membership of about 1.5 million. Approximately 50% of the country's milk is processed by these co-operatives. This co-operative sector has 90 milk processing units with an installed capacity of 6 million litres of milk per day. The most famous milk producers' co-operative is "AMUL" which has almost monopolized the market in India for butter and cheese.

The number of co-operative sugar factories is 142 having 51% of the total manufacturing capacity. In 1980 they contributed some 52% of the total sugar production in the country. A particular significance of the sugar co-operatives is that many of them are located in industrially-backward areas.

There has been a rapid and successful expansion of the oilseed processing and marketing co-operatives. Oilseed processing co-operative units total around 250, and include ground-nut decorticators, oil mills, solvent extraction plants, vegetable oil refineries and feed-mix units.

Co-operative fruit and vegetable processing units deal with dehydration, juice making, pickle making and canning and their total number is 28. Processing of plantation crops is carried out by 58 co-operative processing units (nut, coconut, cashew nut, cardamon, black pepper, coffee and tea).

In Thailand rice mills for paddy production, small units for processing bamboo shoots, tobacco leaves, tea leaves and garlic have been set up in the agricultural co-operative sector but their contribution is not of much significance yet.

10. In some countries, co-operative food processing serves consumption by the local population and seeks to attain self-sufficiency. Occasionally, co-operatives receive government support in this endeavour.

In Indonesia in the 1970s, agricultural co-operatives were provided with loans for a small rice mill, a concrete drying floor and paddy storage. In total about 2,500 mills have been installed, but the programme is now more or less discontinued. Nevertheless, the project has contributed to a considerable excess in milling capacity.

11. Co-operative food processing may be concentrated on one or two main products. These are not staple food items but cash crops and the role of co-operatives is decisive.

The Kenya Co-operative Creameries and the Marikani Milk Scheme have a near monopoly on the sale of dairy products in all urban centres.

In Uganda the major part of the coffee crop is collected and stored by the marketing co-operatives and processed in their factories.

Agricultural co-operatives have modern milling plants in the Republic of Korea. Their operation by primary co-operatives has contributed to an increase in farm income through the enhancement of grain marketability and the reduction of milling charges.

12. The significance of processing co-operatives is still greater in some cases when they are directly involved in the export business, although this is not very frequent in the developing countries.

In the Dominican Republic, agricultural processing and marketing co-operatives represent the most important co-operative sector after the credit unions. They are involved principally in the processing and export of three of the island's major cash crops: banana, citrus and bay oil. Furthermore, they have a smaller but significant role in the production of copra from coconut.

13. Finally, some special cases occur in certain developing countries in the field of co-operative food processing. A few of them are worth mentioning for they may carry some ideas or lessons to be used in the expansion of co-operation with other sectors and with the co-operatives of other countries.

In Costa Rica, industrial co-operatives carry out food processing. For this reason we find those engaged in the production and processing of milk, beef, fish, sea salt, wheat flour and sugar classified as industrial co-operatives.

In Ghana, craftsmen have established food processing co-operatives. There are 353 registered bakers' primary societies with about 40,000 baker members, the bulk of whom are women. The societies procure wheat flour, yeast, sugar, etc. through their unions and distribute them to their members who run their own small bakeries and sell their products directly to consumers. The distillers' co-operatives are among the strongest and most active sectors of the co-operative movement in Ghana. There are 329 primary societies which operate common workshops, obtaining all necessary components for members who do the distillation individually.

In Jamaica, agricultural co-operatives are multipurpose in character. Although they do not have processing factories, one of them has a processing agreement with a privately-owned sugar refinery. Also fishery co-operatives are not involved in marketing, storage, or processing at all, which is rather unique.

(b) Food-processing co-operatives' participation in international collaboration with developing countries: existing constraints

14. The participation of food-processing co-operatives in international collaboration is rather limited. This holds true not only for the co-operatives of developing countries, but also for those of the market-economy and centrally-planned economy countries. It should be noted, however, that no reliable information is available on this in national or international statistical records. The various co-operative movements themselves do not always keep precise records on their involvement, particularly as far as trade relations are concerned. Co-operatives' participation very often appears through intermediaries, i.e. through state or private foreign trading companies. Indeed, co-operative contribution may be part of the business transactions of multinational corporations.

15. Trade relations form only one, though important part of collaboration of developed and developing countries in the field of the development of the food-processing industry. The other no less important area, is the technical assistance provided by the developed countries. In this field the contribution of co-operatives varies again from country to country. It can be stated, however, that the total support provided by co-operatives has been rather significant but tremendous reserves have remained for further development.

16. In several market-economy countries national co-operative organizations, federations and specialized committees of co-operative companies have been dealing with assistance to developing countries. These activities may, and sometimes do, include the development of food processing.

CEBECO-HANDELSRAAD (The National Agricultural Co-operative Wholesale Society of the Netherlands) has been involved in consultant services in a number of developing countries, among them consultancy services for a seed-cleaning plant in Indonesia, for stock management of food-stuffs in Cape Verde, for a food strategy programme with regard to compound feedstuffs production and distribution in Zambia. INTERCOOP of Italy is collaborating with Algeria in the construction of a pasta factory and the construction of a flour mill plant. SILOM (a group of French dairy co-operatives) implemented a project on the establishment of a dairy plant in Niger. The Irish Dairy Board collaborated with Egypt and Saudi Arabia in the field of technology of a local type of cheese.

17. The support given by the centrally-planned economy countries' co-operatives to the developing countries' food industries may be realized in two main areas. They participate in the work of various international organizations and they also establish contacts with the developing countries on a bilateral basis.

One example of the first deserves mention in the context of co-operative food processing as well. In the course of the first Co-operative Development Decade eleven bulletins of the Research Register of Studies on Co-operatives in Developing Countries and Selected Bibliography have been issued. The Research Register, which contains information on co-operative food processing, too, is an ICA project and has been produced by the Hungarian and Polish Co-operative Research Institutes. Both Polish and Hungarian co-operative movements have decided to continue their financial assistance of the production of the bulletins. For the new period COPAC^{6/} has also joined the collaborating parties.

^{6/}COPAC: Committee for the Promotion of Aid to Co-operatives.

18. The centrally-planned economy countries provide technical support to Third World countries, although their activities in this field are limited by their own economic situation. Due to the ways in which the centrally-planned economy countries provide assistance, it is rather difficult to estimate the technical support given especially for food-industry development purposes. All centrally-planned economy countries prefer to channel bilateral technical aid through the government. Thus most of the aid from and to co-operatives forms a part of government activities. Co-operative development projects implemented by government agencies frequently lose the potential extra benefits of their co-operative character.

19. One of the major constraints of extending co-operation between the co-operatives of market-economy and centrally-planned economy countries and the developing countries, is that the co-operatives are understandably responsible to their members and wish above all to satisfy their needs. In addition, the co-operatives themselves often have financial difficulties. These factors undoubtedly limit their involvement in expanding co-operation. The recent international economic crisis and its consequences for the single national economies do not promote aid activities and definitely hinder the expansion of support.

20. The problem is still more crucial in centrally-planned economy countries. Being mostly at an intermediate stage of development, they have only limited resources for the purposes of support to developing countries. This applies also to the co-operatives of the respective countries.

21. In centrally-planned economy countries a good deal of food processing is carried out by agricultural production co-operatives. But they are very seldom involved in foreign trade and in direct co-operation with co-operatives in developing countries. Their produce, including processed food products is, in most cases, exported by separate foreign trading companies. Similarly, the import of inputs or consumer goods is made by the same companies. Among them however, are the co-operatively-owned companies which belong mostly to the consumer co-operative branch.

22. Co-operatives in developed countries receive insufficient information on the needs of and possibilities for co-operation with developing countries' co-operatives or other organizations in the field of food processing.

23. Co-operation in general is limited by the lack of traditional links between the co-operatives of centrally-planned economy countries and the developing countries. The negative effect of this appears in at least two fields. One is the language problem. East European languages are not spoken in developing countries, except by those people who have lived in one of those countries, and lack of knowledge of English or French often causes difficulties in the selection and provision of otherwise well-trained and experienced experts. On the other hand, due to the lack of historical relations with developing countries, there is also a lack of knowledge and expertise regarding the climatic, geographical, ethnic, religious, economic and social characteristics, circumstances and conditions of particular developing countries. The impact of this may occur not only in the difficulty of establishing relations, but also in the possible mistakes of planning and implementing development assistance.

24. A particular problem of the co-operatives of developed countries is the high financial risk of co-operating with developing countries. No sufficient security exists against losses occurring if the co-operation fails.

25. A constraint commonly shared commonly by the co-operatives of market-economy, centrally-planned economy and developing countries is the existence of vested interests. They may have an impact on the local and national levels alike. For instance, resistance of marketing boards to co-operatives' involvement in export business, problems with foreign exchange, etc. Furthermore, vested interests of traders and/or food-industry producers and transnational companies also occur at the international level.

26. Co-operation programmes for food industry development may prove to be not fully successful or even entirely unsuccessful, due to constraints on the recipient side, i.e. in the developing countries. In very general terms this means that development efforts remain isolated because the governments or organizations in the developing countries cannot get things under way. The causes of this are quite well known and cited frequently. Nevertheless, it is important to give at least a list of the most significant ones. Most of the obstacles are associated with financial problems, aggravated by the "debt crisis" of developing countries, and with the lack of the most important preconditions of steady development, among them the lack of inputs, infrastructure, transport, storage capacity, trained manpower, training facilities, low quality of primary produce, low standard of management and organization.

27. In addition to the above general constraints, some specific issues are worth mentioning. According to donor experiences, the efficiency of co-operative education and training projects, so important in developing a food industry, is hindered by inadequacy in the selection of participants from developing countries. The low level of education is the most frequent problem. Furthermore, in a number of cases the qualification, function, duties and responsibilities of the trainees are not in line with the aim of the projects.

28. Problems have also occurred in the implementation and follow-up of assistance programmes. In many instances, the implementation of such programmes or projects is very closely linked to individuals, leading personalities, functionaries, etc. If and when those individuals are transferred to other duties - which happens frequently - the implementation of an assistance programme may stop or completely fail. In this context, mention should be made of the problem of "feedback" in general. Donor agencies very seldom receive information on the follow-up to the project. Sometimes the follow-up is missing altogether, or the whole project that was implemented in the recipient country falls apart after the donor agency has withdrawn.

29. Finally, reference should be made to the fact that the recipient countries' approach to technology transfer is often mistaken. Developing countries tend to be interested only in the most advanced technologies which in practice are not suitable to the conditions of their economies. Intermediate technologies and low-cost technological solutions are underestimated and considered insufficiently attractive for development agencies, including co-operatives in developing countries.

II. MEASURES AIMED AT STRENGTHENING CO-OPERATION IN THE FIELD OF THE FOOD-PROCESSING INDUSTRY

- (a) Co-operatives in industrialized countries (market-economy countries, centrally-planned economy countries, more industrialized developing countries)

30. The co-operatives of market-economy, centrally-planned economy, and the more industrialized developing countries, may seek ways to expand co-operation

with the developing countries. One is the field of commercial relations in which co-operation is mutually beneficial to parties in both developed and developing countries. This type of co-operation would obviously be supported by the members of the industrialized countries' co-operatives. Another area of extended co-operation is the technical and financial assistance given by the co-operatives of developed countries to those in developing countries as well as other institutions involved in food processing. Both directions can be implemented in various ways and through different instruments.

31. In order to give a new impetus to co-operation, the potential of the developed countries' co-operatives should be surveyed. The national or professional federations of co-operatives could take stock of all co-operative food-processing activities with particular emphasis on food-processing co-operatives. Such a survey would provide a "shopping list" for the developing countries in terms of institutions, technologies, trading partners, training possibilities, etc.

32. Parallel with the above, the flow of information between the developed countries' co-operatives and developing countries may be improved or - in most cases - established. This again is the task of national co-operative federations, but assistance from the governments of both developed and developing countries is essential in terms of legislation, financial and institutional support. An efficient system of regular information flow is preferable, through which the developed countries' co-operatives become acquainted with co-operation possibilities and assistance needs, and developing countries learn about potential donor co-operatives.

33. In trade relations, complex, long-term and organic forms of co-operation are needed which go far beyond single, isolated trade transactions - buying or selling on an ad hoc basis. Such alternative forms have already developed both within the co-operation system of market-economy countries and centrally-planned economy countries as well as in the East-West relations of economic co-operation. These forms include complex contracting systems, consortia bidding, joint marketing activities, turn-key projects, franchise and licencing systems.

34. The developing countries often lack the skills, experience or capital to launch and run food-processing plants. In such cases, joint ventures with co-operatives from industrialized countries may be the solution. Therefore, the food-processing co-operatives of industrialized countries may be encouraged to undertake joint ventures in developing countries. This applies to market-economy countries, centrally-planned economy countries and more industrialized developing countries alike.

35. The possibilities of co-operative investments in developing countries could also be investigated. This may be realized within the framework of joint enterprises. It should be noted, however, that foreign investments may cause difficulties for centrally-planned economy and more industrialized developing countries. Neither of them have too much "surplus capital" to be invested abroad. Nevertheless, there may be cases that make it useful to resort to this form of investing in the national production of the developing countries. Moreover, the latter themselves often emphasize the need for the partner's participation in the investment fund and ownership, thereby sharing the risk and financial responsibility. No difficulty occurs if the guiding principle of the joint enterprises with ownership participation is their voluntary and gradual transfer to full national ownership by the country concerned. This may be actually programmed by a contracted termination or gradual withdrawal. Thus the exported investment fund is actually a form of credit provided by the co-operatives of industrialized countries for the development of food processing.

36. Technology transfer is one of the most important areas of co-operation between the co-operatives of industrial countries and the developing countries. Particular emphasis should be placed on suitable technology. In this context the co-operatives of the more industrialized developing countries and centrally-planned economy countries have a particular position and good possibilities. In both groups of countries, simple processing practices and intermediate technology still occur and have transferable expertise, but of course, market-economy countries' co-operatives also have a role to play. Blueprints of food-processing plants should be made available to developing countries. A further possibility is provided by the establishment of food-processing plants for which the complex technology or know-how is supplied by the donor co-operative. This solution would best work on a co-operative-to-co-operative basis, though other actors in developing countries could also be involved.

37. Assistance is needed in institution building. This is another area in which co-operative-to-co-operative assistance seems useful. Institution building may include income distribution, work organization, management system and also the establishment of new food-processing co-operatives, co-operative plants, and workers' co-operatives. In addition, the diversification of the pattern of activities of existing co-operatives to include food processing is also an important factor of development. In this field agricultural-marketing co-operatives in market-economy countries and agricultural production and consumer co-operatives in centrally-planned economy countries have transferable experiences.

38. As part of technology transfer and institution building, the co-operatives of industrialized countries could assist developing countries in launching and developing a publicity campaign for the establishment of new food-processing plants and/or co-operatives. Preparation of brochures, radio broadcasts, press releases and organization of demonstration shows and symposia may form part of this activity.

39. Since management is generally a weak point in the developing countries' economic activities, assistance in this field is of great importance. Co-operatives can offer short- and medium-term management assistance and management consultancy. Management contracts also belong to this issue and a further possibility is assistance in adapting management systems to specific local conditions.

40. The co-operatives of industrialized countries may provide assistance in carrying out experimental food processing projects and/or pilot food-processing co-operatives with the objective of increasing processed-food production, product marketability, improving quality by product adaptation and by strengthening links between food-industry projects and the economy as a whole.

41. Storage is a crucial point and often a bottleneck in the development of food processing. Therefore, co-operative assistance should pay particular attention to this problem and assist developing countries' food processors - whether co-operatives or other - in creating a minimum storage capacity. Assistance may also include provision with storage technologies and preservation technology.

42. The facilities of idle plants may be economically utilized both in food processing and storage development by rehabilitation. This, in collaboration with local parties, may offer a relatively low-cost possibility for donor co-operatives.

43. Co-operatives in the industrialized countries may make both experts and expertise available to assist in the development of food processing in the Third World. The main form of this continues to be the training and education. It should include various levels, from the basics through vocational to management training. Training courses themselves can be carried out either in the donor or in the recipient countries. However, training programmes organized in the donor countries may result in lowering the expenses covered by the donor co-operatives. An additional advantage of this solution is the possibility of field work with donor co-operatives. Training facilities, equipment, text books and other teaching aids are, as a rule, easily available in donor countries' co-operatives.

44. Nevertheless, training in recipient countries may also be justified, particularly when in-service training is emphasized. The co-operatives of industrialized countries may supply personnel to train local staff of food-processing projects. The expenses of the training projects could be shared by donor and recipient countries in such a way that travel costs are covered by the donor and living expenses by the recipient. Centrally-planned economy countries, having foreign exchange difficulties themselves, can use their own airlines for travel by both experts from donor countries and trainees from the developing countries.

45. Both educational and organizational purposes would be furthered by the setting up of model food-processing co-operatives and/or model food-processing workshops in the recipient countries to act as practical examples and references.

46. The professional staff of industrialized countries' co-operatives may carry out, or at least participate in, preinvestment and feasibility studies for food-processing development. Co-operatives themselves can provide technical assistance, while financing could be provided by financial institutions, including co-operative banks. Their involvement is particularly important prior to adopting joint ventures or joint enterprises in developing countries.

47. The co-operative movements, and primarily the national and/or central organizations of market-economy countries and centrally-planned countries, are often involved in scientific research, although most of them do not have their own research institutions. Nevertheless, sponsoring research is a well-known and frequent part of the activity of co-operative movements. Sponsoring applied research in the field of food processing could therefore be extended to the developing countries as a form of assistance by industrialized countries' co-operatives.
48. Experiences of developed countries in co-operative food-processing development can be shared with the developing countries through the participation of policy-makers and experts in meetings, workshops, technical consultations and study tours organized in the industrialized countries, including the more industrialized developing countries.
49. The more industrialized developing countries have the advantage of being close to the rest of the developing countries in terms of both geography and level of development. This facilitates co-operation to such an extent that some experts in the developing countries prefer South-South co-operation instead of North-South. This advantage could also be exploited in the interest of food-industry development. Co-operatives of the more industrialized developing countries may organize occasional or regular exchange of experts and expertise on food processing. Further forms of assistance could take the form of transfer of know-how, provision of trainers, reception of trainees and publication of success stories in co-operative food processing.
50. In some of the market-economy countries, so-called multinational co-operatives have been established; however, not in food processing. Some consider them an alternative for world development. The existing multinational co-operatives have been involved in the promotion of, and assistance to, co-operatives in the developing countries. This and the co-operative characteristics of the multinational co-operatives make it reasonable to suggest that the idea be extended to the specific field of food processing.

(b) Governments and financial institutions of the industrialized countries

51. The co-operatives of industrialized countries can get involved in direct co-operation with developing countries only if the legislative system of their respective countries is supportive. Therefore, the governments of the industrialized countries could review possibilities given for co-operatives in this field, eliminate legal barriers hindering the co-operatives' involvement, if any, and create favourable legal conditions, if necessary.

52. In this context a further problem arises, namely, the governments' role in organizing co-operation and assistance programmes. According to expert opinion from both international and national co-operative movements, in a number of co-operative projects the involvement of governments would not be necessary; indeed, it hinders a real co-operative-like implementation of the respective projects. Therefore, the idea of so-called co-operative-to-co-operative assistance has been raised and supported. This may apply to food-processing development as well and governments of industrialized countries can make the co-operatives' direct involvement in an extended co-operative-to-co-operative co-operation action possible by adequate legislation and economic incentives.

53. All this pre-supposes improved communication between governments and co-operatives in industrialized countries. The main movers in this are the governments, but co-operatives, and their national central organizations in particular, also have a role to play.^{7/}

54. Co-operatives need financial assistance to expand their co-operation with developing countries. It is the governments that can make it possible for them to have the same easy access as other parties to mechanisms of credit, guarantees, flexible tax rates, export insurance and financial aid for their activities.

^{7/}The Ottawa Conference on the Potential for Co-operative Food Processing in Developing Countries held in August 1983 also emphasized "the need for better consultative mechanisms between co-operatives and governments".

55. Government assistance would also be very useful in preparing experts to work in developing countries. In this context, primarily language training and the familiarization of experts with the local conditions of the developing countries are the areas in which co-operatives need support. It should be noted that this problem occurs only in certain groups of countries, and mainly in centrally-planned economy countries.

56. An important area is research and training in which both governments and financial institutions of industrialized countries should help the co-operatives. Financing research projects aimed at co-operative food-processing development would help a lot. In addition, provision of funds for training and education programmes and fellowships for co-operative food-processing programmes, including co-operative-based training in industrialized countries, is needed.

57. Although a number of sources exist, the financing of co-operative food processing projects remains a problem. Financial institutions, in particular co-operative banks, in industrialized countries could contribute to co-operative involvement by helping co-operatives to identify existing sources of funds for food-processing activities carried out by co-operatives in developing countries.

58. Similarly, financial institutions of industrialized countries could design and recommend:

- credit schemes for co-operation between co-operatives of industrialized and developing countries;
- a financing or banking system, including co-operative banking, in developing countries, which promotes the development of food processing with the final objective of self-reliance.

59. In order to make co-operative ventures in developing countries financially viable, financial institutions, primarily co-operative banks, can participate in the preparation of pre-investment and/or feasibility studies even if they are not involved in financing the project.

60. Finally, the banks of industrialized countries could participate as financing institutions in "triangular co-operation" with the co-operatives of developed countries and the co-operating partners in developing countries.

(c) Governments and business circles in developing countries

61. Above all, a favourable climate for co-operation with co-operatives from industrialized countries should be created through government measures. This may require considerable changes in government policy. Indeed, it may require the formulation of new government policy. In any case, in a successful operation the impact of government action or non-action is crucial. On the other hand, one should bear in mind that the assessment of possible future developments in food-industry co-operation must take into account the very different political, economic and social conditions prevailing in the various countries. Thus the intensity and forms of co-operation between the co-operatives of industrialized countries and the developing countries will vary from country to country.

62. The legal and legislative obstacles should be removed so as to allow for the establishment of co-operation projects with the participation of co-operatives from market-economy, centrally-planned economy and more industrialized developing countries alike. It should also allow for the introduction of new organizational forms between co-operatives, between co-operatives and other agents in the economy and between the local population and the co-operatives and other institutions. As to the organizational forms, the co-operative concept should be broadened to include various pre-co-operatives, partnerships and informal grouping of people involved in food processing.

63. The stability of economic policy, currency and prices is crucial in encouraging co-operatives of industrialized countries co-operatives to co-operate with business circles in the developing countries. The governments of the developing countries should seek ways and means of creating appropriate mechanisms which would provide guarantees for the above - or at least assurances against losses due to changes in economic policy.

64. Governments, government agencies, co-operative national/central organizations and business circles alike should help the co-operatives of the industrialized countries in the identification of suitable possible counterparts in their respective countries. Government-level co-ordination, however, seems reasonable in this activity.

65. Governments may promote the development of co-operative food processing by establishing a special fund for supporting:

- the organization of new food processing co-operatives;
- the broadening of the pattern of activities of the existing co-operatives to include or to increase food processing;
- any other parties who start or expand food processing.

This measure would contribute to broadening the list of potential co-operating partners for the co-operatives of industrialized countries.

66. Governments of developing countries - either through existing agencies or by creating new agencies - should encourage and help small-scale food processors and those carrying out home preservation and processing, to pool into groupings, including co-operatives, through which they can attain scale advantages and get involved in national and/or international affairs in terms of both domestic supply of processed food and producing exportable commodities.

67. The presence or lack of market safety has a significant impact on the attractiveness of co-operation with developing countries by the co-operatives from developed countries. Governments of the developing countries should therefore try to encourage co-operation from the marketing side. This may be done by carrying out public purchase in cases of marketing difficulties, or on a regular contractual basis.

68. The lack of infrastructure often hinders the development of commodity productions. This also applies to food processing. Although financial resources are scarce, governments should find ways and means of improving the infrastructure thereby also contributing to making co-operation possible and more attractive.

69. Training and education have to be carried out in the respective developing countries (grass-roots level training, on-the-job training, etc.). This requires a minimum of training facilities which again has to be created by the governments in collaboration with other organizations, e.g. co-operative federations.

70. Since management and maintenance is a key problem in food-industry development, both co-operatives and non-co-operative business circles in developing countries should try to obtain management and maintenance assistance from the co-operatives of industrialized countries. This may take various forms including management contracts and hiring management consultancy.

III. CONCLUDING REMARKS

71. Development of the food-processing industry in the developing countries is of crucial importance to their overall economic and social advancement. Given all the difficulties in terms of finances, expertise and technology, the developing countries themselves cannot make decisive progress without external assistance. The highly profit-oriented activities of transnational corporations which are the most involved in Third World business are not always in line with the requirements of the developing countries. The co-operatives of the industrialized countries are appropriate organizations and have the potential to co-operate with various parties engaged in food processing in developing countries. The co-operatives of the market-economy countries, centrally-planned economy countries and the more industrialized developing countries alike have a role to play.

72. In order to realize co-operation, a number of measures have to be taken by both co-operatives carrying out food processing in industrialized countries, the governments and financial institutions of the same, and the governments and business circles in the developing countries. The majority of the measures - a draft list of which is given in this paper - are of the same or similar character in market-economy, centrally-planned economy and more industrialized developing countries. Nevertheless, there are some measures that need to be taken in one particular group of countries as necessitated by their specific conditions.

73. UNIDO, as the leading agency responsible for industrial development within the UN system, is instrumental in furthering food-industry development. It can help in identifying and bringing together parties - countries or co-operatives - potentially capable of co-operation in food processing. UNIDO could also assist co-operation by convening and organizing international meetings, consultations, workshops and study tours and by providing basic ideas and models for discussion. Moreover, UNIDO itself could become one of the collaborating parties by participating in the financing of development projects assisting food-processing industries in developing countries. The participation of other international organizations like FAO, ILO, ICA, COPAC in forwarding the development of collaboration between the co-operatives of the developed countries and the food industries of developing countries is also of vital importance.

Sources of data as contained in this paper

1. Report of the Second Consultation on the Food-Processing Industry with Special Emphasis on Vegetable Oils and Fats, Copenhagen Denmark, 15-19 October 1984 (ID/329)
2. COGECA (Comité Général de la Coopération Agricole de la C.E.E.) Report on Activities in 1977-1979
3. Facts and Figures relating to the Co-operative Banks, Commodity and Service Co-operatives 1980, DGRU Wiesbaden, 1980
4. John G. Craig: Multinational Co-operatives, Western Producer Prairie Books, Saskatoon, Saskatchewan, 1976
5. Agricultural Co-operation in Sweden, Plunkett Foundation for Co-operative Studies, Oxford, 1984
6. Organizing Meatpacking Co-operatives, United States Department of Agriculture, ACS Research Report Number 11
7. COPAC Co-operative Information Notes:
 - No. 6: Kingdom of Thailand
 - No. 7: Republic of Indonesia
 - No. 8: Socialist Republic of Sri Lanka
 - No.12: Republic of Ghana
 - No.17: Jamaica
 - No.19: Republic of Dominica
 - No.20: Republic of Korea
 - No.21: Costa Rica
8. Rural Co-operatives: Some Lessons and Suggestions from a UNDP Evaluation Study, COPAC Co-operative Programme Note, 1983
9. Kooperacija v stralah socializma (Co-operation in the countries of socialism), Izd. "Ekonomika", Moskva, 1985
10. V.B.L. Mathur: Role of Co-operatives in Food Production, Processing and Marketing in India: A Case Study (Mimeographed. Prepared for the UNIDO Expert Group Meeting on Role of Co-operatives in the Development of Food Processing Industries in Developing Countries, Vienna 1981, UNIDO/PC.5))
11. Co-operatives Canada '83. Annual Review published by Co-operative Union of Canada, Ottawa, Ontario
12. The role of co-operatives and small- and medium-scale enterprises in integrated development of the food-processing industry (Issue paper prepared by the UNIDO secretariat, 1984, ID/WG.427/7)
13. Final Report - The Potential for Co-operative Food Processing in Developing Countries; Towards Global Interdependence, Ottawa, August 22-24, 1983.